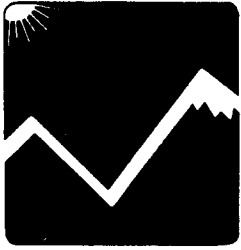


ATTACHMENT B
DISTRICT OPERATING PERMITS

**San Joaquin Valley Unified Air Pollution Control District
Operating Permit**



San Joaquin Valley
Unified Air Pollution Control District

Permit to Operate

FACILITY ID: N-2073

EXPIRATION DATE: 10/31/2001

LEGAL OWNER OR OPERATOR: OGDEN MARTIN SYSTEMS
MAILING ADDRESS: P.O. BOX 278
CROWS LANDING, CA 95313

FACILITY LOCATION: 4040 FINK RD, CROWS LANDING

FACILITY DESCRIPTION: MUNICIPAL SOLID WASTE COMBUSTOR

The facility's Permit to Operate may include facilitywide requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

David L. Crow
Executive Director/APCO

Seyed Sadredin
Director of Permit Services

Northern Region * 4230 Kiernan Ave., Suite 130 * Modesto, CA 95356
(209) 545-7000 * FAX (209) 545-8652

San Joaquin Valley Unified Air Pollution Control District

PERMIT UNIT: N-2073-1-2

EXPIRATION DATE: 10/31/2001

EQUIPMENT DESCRIPTION:

POWER GENERATION SYSTEM: TWO 400 TON/DAY MUNICIPAL SOLID WASTE COMBUSTOR/BOILERS PRODUCING 21.5 MW OF ELECTRICITY. AIR POLLUTION CONTROL EQUIPMENT: DRY LIME SCRUBBERS; FLY ASH BAGHOUSE; THERMAL DE-NOX AMMONIA INJECTION SYSTEM; LIME SLURRY INJECTION

Permit Unit Requirements

1. Should any provision, clause, sentence, paragraph, section or part of these conditions for any reason be judged invalid, such judgment shall not affect or invalidate the remainder of these conditions. [District Rule 1130]
2. Particulate matter emissions from each combustion unit shall not exceed 0.0275 gr/dscf, corrected to 12% CO₂, as measured by EPA Methods 1-5, including the condensable portion in the "back-half". [District NSR Rule]
3. Particulate matter emissions from each combustion unit shall not exceed 0.011 gr/dscf, corrected to 12% CO₂, as measured by EPA Methods 1-5. [District NSR Rule & 40 CFR 60.33b]
4. Particulate matter emissions from each combustion unit shall not exceed 0.008 gr/dscf, corrected to 12% CO₂, for the fraction of particles less than 2 μ in diameter, as measured by Andersen Cascade Impactor, Flow Sensor Multiclone. [District NSR Rule]
5. The NO_x emissions from each combustion unit shall not exceed 200 ppmV, dry, corrected to 12% CO₂ as measured by EPA Methods 1-4 & 7E. Compliance with this limit shall be determined based on an eight rolling hour average. [District NSR Rule & 40 CFR 60.33b]
6. The THC emissions (as CH₄) from each combustion unit shall not exceed 70 ppmV, dry, corrected to 12% CO₂ as measured by EPA Methods 1-4 and 25A. [District NSR Rule]
7. The HF emissions shall not exceed 3 ppmV, dry, corrected to 12% CO₂. [District Rule 4102]
8. Either the SO₂ emissions from each combustion unit shall not exceed 30 ppmV, dry, corrected to 12% CO₂, based on an eight hour rolling average, or the SO₂ removal efficiency shall be at least 80% as measured by EPA Methods 1-4 & 6C. [District NSR Rule]
9. The SO₂ 80 percent removal efficiency shall be based on the measurement of the inlet and outlet SO₂ concentrations, corrected to 12% CO₂. [District NSR Rule]
10. Until 19 December 2000, the CO emissions from each combustion unit shall not exceed 400 ppmV, dry, corrected to 12% CO₂ as measured by EPA Methods 1-4 & 10. Compliance with this limit shall be determined based on an eight hour rolling average. [District NSR Rule]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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11. After 19 December 2000, the CO emissions from each combustion unit shall not exceed 100 ppmV, dry, corrected to 12% CO₂ as measured by EPA Methods 1-4 & 10. Compliance with this limit shall be determined based on a four hour block arithmetic average as defined in 40 CFR 60.51b. [40 CFR 60.34b]
12. The cadmium emissions from each combustion unit shall not exceed 0.040 mg/dscm (18 gr/million dscf), corrected to 12% CO₂, as measured by EPA Methods 1, 3, and 29. [40 CFR 60.33b]
13. The lead emissions from each combustion unit shall not exceed 0.44 mg/dscm (200 gr/million dscf), corrected to 12% CO₂, as measured by EPA Methods 1, 3, and 29. [40 CFR 60.33b]
14. After 19 December 2000, the mercury emissions from each combustion unit shall not exceed 0.080 mg/dscm (35 gr/million dscf), corrected to 12% CO₂, or the mercury removal efficiency shall be at least 85% by weight, whichever is less stringent, as measured by EPA Methods 1, 3, and 29. [40 CFR 60.33b]
15. The SO₂ emissions from each combustion unit shall not exceed 29 ppmV, dry, corrected to 12% CO₂, or the SO₂ removal efficiency shall be at least 75% (by weight or volume), whichever is less stringent as measured by EPA Methods 1-4 & 6C. Compliance with this limit shall be determined based on a 24-hour daily geometric mean. EPA method 19 shall be used to calculate the daily geometric average sulfur dioxide emission concentration and removal efficiency. [40 CFR 60.33b]
16. The Hydrogen Chloride (HCl) emissions from each combustion unit shall not exceed 29 ppmV, corrected to 12% CO₂, or the HCl removal efficiency shall be at least 95% (by weight or volume), whichever is less stringent, as measured by EPA Method 26. [40 CFR 60.33b]
17. The Dioxin/Furan emissions from each combustion unit shall not exceed 30 ng/dscm (total mass), corrected to 12% CO₂, as measured by EPA Method 23. [40 CFR 60.33b]
18. The facility shall be exempt from all emission limitations specified in this permit for periods of start-up, shutdown, and malfunction, as defined in 40 CFR 60.58b(a). [District NSR Rule]
19. The CO emissions shall not exceed 800 pounds in any one day. [District NSR Rule]
20. The CO emissions shall not exceed 121.9 tons/yr. [District NSR Rule]
21. The NO_x emissions shall not exceed 2,260 pounds in any one day. [District NSR Rule]
22. The NO_x emissions shall not exceed 344.4 tons/year. [District NSR Rule]
23. The SO₂ emissions shall not exceed 800 pounds in any one day. [District NSR Rule]
24. The SO₂ emissions shall not exceed 121.9 tons/year. [District NSR Rule]
25. The PM emissions shall not exceed 475 pounds in any one day. [District NSR Rule]
26. The PM emissions shall not exceed 72.4 tons/year. [District NSR Rule]
27. The THC emissions shall not exceed 96 pounds in any one day. [District NSR Rule]
28. The THC emissions shall not exceed 14.6 tons/year. [District NSR Rule]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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29. Until 19 December 2000, the Hg emissions shall not exceed 7.35 pounds in any one day as measured by EPA Method 101A. [District Rule 4102]
30. The mass emission rates shall be calculated from the hourly stack concentrations and the volumetric flow rate via the F-factor as determined in the most recent source test. [District NSR Rule]
31. Each combustion unit shall only be allowed to emit half of the total allowable emission rate for each pollutant. [District NSR Rule]
32. The total steam generated from each boiler shall not exceed 110% of the maximum demonstrated combustion unit load achieved in the most recent Dioxin/Furan performance test, as defined in section 40 CFR 60.51b. [40 CFR 60.34b]
33. The maximum flue gas temperature, measured at the particulate matter control device inlet from each boiler, shall not be higher than 17 deg. C (31 deg. F) above the maximum demonstrated particulate matter control device temperature as defined in section 40 CFR 60.51b. [40 CFR 60.34b]
34. The steam load and particulate matter control device inlet flue gas temperature limitations shall apply at all times except during the annual Dioxin/Furan performance test, the two weeks preceding the annual Dioxin/Furan performance test, and when the facility obtains a waiver in accordance with permission granted by the Administrator or the Air Pollution Control Officer. [40 CFR 60.53b]
35. A monthly report summarizing the quantity of pollutant emissions of SO₂, NO_x, and CO, based on data from the CEM system required by conditions 55, 56, & 57, shall be included in the information required by condition 78. Copies of the monthly reports prepared pursuant to this condition shall be sent to the district office by the 15th day of the following month. [District Rule 1070]
36. Ammonia (NH₃) breakthrough of the exhaust shall not exceed 50 ppmV. The facility shall be exempt from this condition for periods of start-up, shutdown, and malfunction as defined in 40 CFR 60.58b(a). [District Rule 4102]
37. Opacity exhibited by the gases discharged to the atmosphere from each combustion unit, other than water vapor, shall not exceed 10 percent based on a six minute average as measured by EPA Method 9. [40 CFR 60.33b]
38. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as or darker than Ringelmann 1 or equivalent to 20% opacity. [District Rule 4101]
39. Trace metals, PAH, PCB, Dioxin and Furan emissions shall not exceed the emission levels as listed in the most recent amended version of the "Stanislaus Waste-to-Energy Facility Health Risk Assessment", Radian Corporation, Sacramento, CA, 16 October 1986 (amended 9 March 1989) which has been approved by the Air Pollution Control Officer. [District Rule 4102]
40. The Dioxin and Furan emissions shall not exceed 610 ng/s, corrected to 12% CO₂, based on the Department of Health Services toxic equivalent calculation. [District Rule 4102]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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41. During any period of time that MSW is burning on the grates, the combustion gas retention time shall be maintained at a minimum of one second, the combustion zone temperature shall be maintained at a minimum of 1800 deg. F, and the furnace roof temperature shall be maintained at an average (4 hour arithmetic block) of 1270 deg. F. [District NSR Rule]
42. OMSS shall immediately notify the District of any breakdown condition, as defined in District Rule 1100 - Equipment Breakdown. [District Rule 1100]
43. Fuel Oil #2, with a sulfur content not to exceed 0.25% by weight, may be used as necessary to maintain the minimum combustion zone temperature requirements. [District NSR Rule]
44. A furnace roof temperature of 1270 degrees F shall be stabilized, as measured by multiple thermocouples, to ensure that a minimum temperature of 1800 degrees F is established above the grate prior to the ignition of MSW. [District NSR Rule]
45. The ammonia (NH₃) injection rate shall be measured and recorded continuously. [District NSR Rule]
46. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule]
47. The baghouse shall have a maximum effective air-to-cloth ratio of 4:1 and shall be equipped with an automatic cleaning mechanism. [District NSR Rule]
48. Replacement bags numbering at least 10% of the total number of bags in the largest individual combustion unit baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
49. Paved areas shall be kept free of visible dust at all times and shall be vacuum swept at least once every fourteen days. Records of vacuum sweeping shall be maintained and made available to the District upon request. [District Rule 4102]
50. The ash shall be handled in such a manner as to mitigate fugitive emissions to the maximum extent possible. [District NSR Rule]
51. Hazardous materials shall not be burned in this equipment. Hazardous materials are that portion of solid waste which, by reason of its composition or characteristics, is: (a) hazardous waste as defined in the Solid Waste Disposal Act, 42 USC section 6901 et. seq., and the regulations thereunder, the California Health & Safety Code, Div. 20, Chs. 6.5, 6.7, and 6.8 (section 25100 et. seq.), the California Administrative Code, Title 22, Div. 4, Ch. 30, and any similar or substituted legislation or regulations or amendments to the foregoing; (b) any other materials which any governmental agency or unit having appropriate jurisdiction shall determine from time to time is harmful, toxic, or dangerous, or otherwise ineligible for disposal through the facility; and (c) any material, other than residential or commercial solid waste of the type historically collected by the County and the City as acceptable for disposal into non-hazardous waste landfills, which would result in process residue being hazardous waste under (a) or (b) above. [District 4102]
52. There shall be no visible emissions from any location other than designated vents on refuse receiving, processing or storage buildings at any time. [District NSR Rule]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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53. The facility shall install, calibrate, maintain, and operate a carbon dioxide CEM at the economizer and stack locations of each combustion unit, in accordance with 40 CFR 60.58b(b) and Appendices B and F. [40 CFR 60.38b]
54. The facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system in accordance with 40 CFR Subpart A, Section 60.13 and Appendix B. [40 CFR 60.38b]
55. The facility shall install, calibrate, maintain, and operate a sulfur dioxide CEM at the stack locations in accordance with 40 CFR 60.58b(e) and Appendices B and F. [40 CFR 60.38b]
56. The facility shall install, calibrate, maintain, and operate a nitrogen oxides CEM at the stack locations in accordance with 40 CFR 60.58b(h) and Appendices B and F. [40 CFR 60.38b]
57. The facility shall install, calibrate, maintain, and operate a carbon monoxide CEM at the stack locations in accordance with 40 CFR 60.58b(i) and Appendices B and F. [40 CFR 60.38b]
58. The facility shall install, calibrate, maintain, and operate a continuous steam flow monitoring and recording device and a device to measure temperature at the inlet of each particulate matter control device in accordance with 40 CFR 60.58b(i). [40 CFR 60.38b]
59. OMSS shall be responsible for providing the District access, via telemetry, to the stored computerized data associated with the continuous emission monitoring system. [District Rule 1080]
60. Continuous monitoring and recording equipment shall be provided for the following: (a) No. 2 fuel oil burning rate; (b) Temperature - sufficient monitors to demonstrate combustion unit temperature profile after secondary air injection. [District Rule 1080]
61. In the event that monitoring or test data shows that emissions from the facility exceed any emission limitation conditions of this Permit to Operate, OMSS shall take immediate corrective action to bring the plant's emissions within these limitations. [District NSR Rule]
62. Emissions in excess of those allowed by this permit shall be cause for the District to order an immediate reduction in fuel feed rate or to take other appropriate abatement action. [District Rule 2080]
63. OMSS shall notify the district of any emission violation by the next working day after such violation has occurred. [District Rule 2080]
64. Source testing to demonstrate compliance with permit conditions shall be conducted on an annual basis. [District Rule 1081]
65. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081]
66. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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67. Source tests shall include a test of both combustion unit exhausts following the baghouse for the following parameters, corrected to 12% CO₂ on a dry basis: (a) Oxides of nitrogen emissions; [District Rule 1081]
68. Source tests shall include a test of both combustion unit exhausts following the baghouse for the following parameters, corrected to 12% CO₂ on a dry basis: (b) Total hydrocarbons, as methane; (c) Carbon monoxide; [District Rule 1081]
69. Source tests shall include (d) Total Particulates and shall be conducted as specified in condition 2. If the measured Total Particulates are greater than 0.008 gr/dscf, corrected to 12% CO₂, testing shall be conducted to verify compliance with conditions 2, 3, & 4. [District Rule 1081]
70. Source tests shall include a test of both combustion unit exhausts following the baghouse for the following parameters, corrected to 12% CO₂ on a dry basis: (e) Sulfur dioxide; (f) Exhaust flow rate, wet and dry; [District Rule 1081]
71. Source tests shall include a test of both combustion unit exhausts following the baghouse for the following parameters, corrected to 12% CO₂ on a dry basis: (g) Polynuclear aromatic hydrocarbons (Benzo-A-Pyrene, Benzo-E-Pyrene, Benzo-A-Anthracene, and Coronene and PCB); (h) Dioxins and Furans. [District Rule 1081]
72. The following Dioxin isomers & homologues shall be measured in both the combustion unit exhausts: 2,3,7,8 tetra CDD; total tetra CDD; 1,2,3,7,8 penta CDD; total penta CDD; 1,2,3,4,7,8 hexa CDD; 1,2,3,6,7,8 hexa CDD; 1,2,3,7,8,9 hexa CDD; total hexa CDD; 1,2,3,4,6,7,8 hepta CDD; total hepta CDD; total octa CDD. [District Rule 1081]
73. The following Furan isomers & homologues shall be measured in both the combustion unit exhausts: 2,3,7,8 tetra CDF; total tetra CDF; 1,2,3,7,8 penta CDF; 2,3,4,7,8 penta CDF; total penta CDF; 1,2,3,4,7,8 hexa CDF; 1,2,3,6,7,8 hexa CDF; 1,2,3,7,8,9 hexa CDF; 2,3,4,6,7,8 hexa CDF; total hexa CDF; 1,2,3,4,6,7,8 hepta CDF; 1,2,3,4,7,8,9 hepta CDF; total hepta CDF; total octa CDF. [District Rule 1081]
74. Source tests of both combustion unit exhausts shall be performed for the following, corrected to 12% CO₂ on a dry basis: (i) Heavy metals as listed in the most recent amended version of the "Stanislaus Waste-to-Energy Facility Health Risk Assessment", Radian Corporation, Sacramento, CA, 16 October 1986 (amended 9 March 1989) which has been approved by the Air Pollution Control Officer; (j) HCl. [District Rule 1081]
75. Cooling tower drift shall not exceed 0.005 percent of the circulating water flow or a maximum annual drift emission rate of 1,090,000 kg/year. [District Rule 4102]
76. Soot blowers or super heater rappers shall be operated in a mode consistent with normal cleaning requirements of the system during the compliance tests. [District Rule 1081]
77. The thermal DeNO_x system shall be in full use whenever this equipment is fired with MSW. [District NSR Rule]
78. OMSS shall maintain a complete central file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this Permit to Operate. [District Rule 1070]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

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79. This file shall include, but not be limited to: (a) Data collected from in-stack monitoring instruments; (b) Input rate records for all fuels burned; (c) Purchase records that indicate the sulfur content, by weight, of all fuel oil #2 purchased; (d) Results of all source tests; [District Rule 1070]

80. This file shall include, but not be limited to: (e) All other air pollution system performance evaluations & records of calibration checks, calibration gas cylinder changes, adjustments & maintenance performed on all equipment. [District Rule 1070]

81. Records shall be kept for each unit with the following: (a) Specific time of operation of each combustion unit; (b) Specific time of operation of the auxiliary burners; (c) Equipment breakdowns or malfunctions; (d) Exceedances of emission standards. [District Rule 1070]

82. OMSS shall follow all written maintenance procedures & schedules for the following: all emissions control equipment, combustion units, and monitoring equipment for measuring emission levels. [District Rule 1070]

83. Operating & maintenance manuals, subject to district review, shall be provided for the equipment covered by this permit. OMSS operators shall be trained in the operation & maintenance of both fuel burning & pollution control equipment. [District Rule 1070]

84. All equipment, facilities and systems installed or used to comply with the terms and conditions of this Permit to Operate shall be maintained in good working order and be operated as required to meet the conditions of this permit. [District Rule 2080]

85. The district reserves the right to require OMSS to re-evaluate the health risk assessment if there is a significant change in population locations as projected in the health risk assessment, or new health data becomes available. [District Rule 4102]

86. Chromium compounds shall not be used as an additive in the cooling tower water. [District Rule 4102]

87. By 15 May 1999 or 12 months after the California State 111(d) Plan is approved, whichever is later, the facility shall be in compliance with the requirements of operator training and certifications as specified under 40 CFR 60.54b(a) through (c). [40 CFR 60.35b]

88. All chief facility operators, shift supervisors, and control room operators shall complete the municipal waste combustion unit operator training course, unless the above persons have already obtained a provisional or full ASME certification on or before 15 May 1999 or the EPA approval date of the California State 111(d) Plan, whichever is later. [40 CFR 60.35b]

89. The facility shall develop and annually update a site-specific operating manual in accordance with 40 CFR 60.54b(c). [40 CFR 60.35b]

90. Each operator and all maintenance personnel shall receive initial and annual training on the site-specific operating manual in accordance with 40 CFR 60.54b(f). [40 CFR 60.35b]

91. The site-specific operating manual and operating manual training records shall be accessible to all operations and maintenance personnel and shall be made available to the enforcement agency upon request. [40 CFR 60.35b]

Permit unit requirements continue on next page

These terms and conditions are part of the facilitywide Permit to Operate.

Permit unit requirements continued:

N-2073-1-2

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92. The facility shall not cause visible emissions from ash conveying systems, including transfer points, in excess of 5% of the observation period, as determined by EPA Method 22. Fugitive ash emissions do not include emissions within a building, an enclosed ash conveyor, or during periods of maintenance and repair of the ash conveyor systems. [40 CFR 60.36b]

93. The facility may elect to alternate Dioxin/Furan testing on each stack, if the previous two years indicate Dioxin/Furan emissions levels less than or equal to 15 ng/dscm total mass, corrected to 12% CO₂. [40 CFR 60.38b]

94. The facility shall maintain all records required by this permit and records of the information as required in 40 CFR 60.59b for a period of at least five years. [40 CFR 60.39b]

95. The facility shall submit an annual report in accordance with 40 CFR 60.59b(g) by February 1 of each year following the calendar year in which the data was collected. [40 CFR 60.39b]

96. The facility shall submit semiannual reports within 31 days following the end of each 6 month period in accordance with 40 CFR 60.59b(h). [40 CFR 60.39b]

97. No later than 19 July 1999, OMSS shall submit to the District a final compliance plan and an application for an Authority to Construct for the installation of any control equipment necessary to comply with the mercury emissions limitation specified in condition 14. [40 CFR 60.39b]

98. No later than 19 January 2000, OMSS shall award contracts for the installation of any control equipment necessary to comply with the mercury emissions limitation specified in condition 14. [40 CFR 60.39b]

99. No later than 19 May 2000, OMSS shall initiate onsite construction of any control equipment necessary to comply with the mercury emissions limitation specified in condition 14. [40 CFR 60.39b]

100. No later than 19 November 2000, OMSS shall complete onsite construction of any control equipment necessary to comply with the mercury emissions limitation specified in condition 14. [40 CFR 60.39b]

101. No later than 19 December 2000, OMSS shall demonstrate final compliance with the mercury emissions limitation specified in condition 14. [40 CFR 60.39b]

102. No later than 12 months after the California State 111(d) Plan for implementing 40 CFR Subpart Cb is approved by EPA, the facility shall be in compliance with the conditions contained in this Permit to Operate that solely cite 40 CFR 60, Subpart Cb as being their statutory authority, with the exception of the conditions that specify explicit compliance dates. [40 CFR 60.39b]

103. Only those conditions contained in this Permit to Operate that cite 40 CFR 60, Subpart Cb as being their statutory authority are federally enforceable through the California State 111(d) Plan for implementing 40 CFR Subpart Cb.

These terms and conditions are part of the facilitywide Permit to Operate.

**South Coast Air Quality Management District
Operating Permits**



PERMIT TO OPERATE

This initial permit shall be renewed by ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

ID 037336

Or Operator:

COMMERCE REFUSE TO ENERGY FACILITY
P O BOX 4998
WHITTIER, CA 90607-4998

Equipment

located at: 5926 SHEILA ST, COMMERCE, CA 90040-2403.

Equipment Description:

RESOURCE RECOVERY SYSTEM CONSISTING OF:

1. REFUSE CHARGING HOPPER
2. COMBUSTOR, MUNICIPAL SOLID WASTE FIRED, FOSTER WHEELER, MODEL NO. C845-260, WATER WALL TYPE, WITH RECIPROCATING GRATES, A NATURAL GAS FIRED AUXILIARY BURNER RATED AT 145,000 SCF/HOUR, AND A MULTI-LEVEL AMMONIA INJECTION SYSTEM, VENTING THE ASH PLANT, WASTE RECEIVING AND STORAGE AREA VIA THE 55,000 CFM UNDERFIRE PRIMARY COMBUSTION AIR FAN AND THE 24,000 CFM OVERFIRE SECONDARY COMBUSTION AIR FAN.
3. UNDERFIRE COMBUSTION AIR PREHEATING SYSTEM, MULTI-JET THERMAL OXIDIZER, MODEL HFL 2000R, NATURAL GAS FIRED, 3.4 MMBTU/HR, DUCTWORK CONNECTION TO THE FIRST STAGE UNDERFIRE COMBUSTION AIR SUPPLY AND UNDERFIRE CONTROL EQUIPMENT.
4. BOILER SECTION, WATER TUBE TYPE, RATED AT 130,000 LB/HR OF STEAM AT 650 PSIG AND 750 DEGREES FAHRENHEIT, WITH A SUPERHEATER, ECONOMIZER, AND SOOT BLOWERS.
5. STEAM TURBINE, FUJI, MODEL NO. KQ69053G1, DRIVING A 12 MW GENERATOR.
6. DRY LIME INJECTION INTO THE FURNACE.
7. AMMONIA STORAGE TANK, 12,000 GALLON CAPACITY.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

FILE COPY



PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE ASH SYSTEM, TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
9. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE. REFUSE SHALL NOT BE INTRODUCED INTO THE FURNACE EXCEPT DURING PERIODS OF NATURAL GAS CURTAILMENT AND UNTIL THE UNIT IS ON-LINE SYNCHRONIZED. IN ADDITION, FIRING OF NATURAL GAS SHALL CONTINUE UNTIL A POWER GENERATION LEVEL OF 5 MW IS REACHED.
10. FOR THE PURPOSE OF THIS PERMIT, A START-UP SHALL BE DEFINED AS THE FIRST 3 HOURS AFTER THE COMBUSTOR BEGINS THE CONTINUOUS BURNING OF MUNICIPAL SOLID WASTE.

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PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

11. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN SHALL BE DEFINED AS THE PERIOD OF TIME STARTING FROM THE CESSATION OF REFUSE CHARGING INTO THE FURNACE UNTIL COMPLETE REFUSE BURNOUT. DURING SHUTDOWN, THE FURNACE SHALL BURN NATURAL GAS AND SHALL REMAIN ON-LINE UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED. THE DURATION OF A SHUTDOWN SHALL NOT EXCEED 3 HOURS PER OCCURRENCE.
12. EXCEPT AS PROVIDED BY PART 60.56b, THE APPLICABLE STANDARDS UNDER 40 CFR SUBPARTS Cb AND Eb. SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF WARM-UP, START-UP, SHUTDOWN, OR MALFUNCTION. FOR THE PURPOSE OF COMPLIANCE WITH THIS CONDITION A MALFUNCTION SHALL ALSO BE LIMITED TO 3 HOURS PER OCCURRENCE.
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP OR SHUTDOWN.
14. RESIDUE FROM THE GRATES AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
15. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(b).
16. THE TOTAL ALLOWED SUPPLEMENTAL NATURAL GAS USAGE FOR THIS BOILER SHALL NOT EXCEED 1,300,000 STANDARD CUBIC FEET PER DAY.
17. NATURAL GAS CONSUMPTION FOR THE COMBUSTION AIR PREHEATER SHALL NOT EXCEED 76,800 STANDARD CUBIC FEET PER DAY.
18. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM THE ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58(b)(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
19. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST 5 YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
R-D96114
A/N 306663
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CONTINUATION OF PERMIT TO OPERATE

This Permit to Operate No. R-D96114 supersedes Permit to Operate
No. D96114 issued on 1/31/96.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED
ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF
THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF
CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT
CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES,
REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/7/98

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This initial permit shall be renewed by ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner ID 037336
Or Operator: COMMERCE REFUSE TO ENERGY FACILITY
P O BOX 4998
WHITTIER, CA 90607-4998

Equipment
located at: 5926 SHEILA ST, COMMERCE, CA 90040-2403.

Equipment Description:

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. ABSORBER, SPRAY DRYER TYPE, WITH CALCIUM HYDROXIDE OR SODIUM HYDROXIDE INJECTION.
2. BAGHOUSE, WITH A MAXIMUM AIR-TO-CLOTH RATIO OF 2.3 TO 1, REVERSE AIR CLEANING, TOTAL FILTER AREA OF 62,225 SQ. FT.
3. EXHAUST SYSTEM WITH AN INDUCED DRAFT FAN, 110,000 CFM CAPACITY, VENTING THE REFUSE COMBUSTION SYSTEM.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS AND THE SPRAY DRYER HOPPER SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND/OR CONTAINERS EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
5. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER COLUMN, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.

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PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

6. THE VOLUME AND/OR MASS OF REAGENT INJECTED FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
7. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b.
8. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
9. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
10. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
11. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(c).
12. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
13. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 190 PPMV (HOURLY AVERAGE) AND 225 PPMV (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
14. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 215 PPMV (HOURLY AVERAGE), AT 3 % OXYGEN ON A DRY BASIS.

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15. NOT LESS THAN 59 GALLONS PER HOUR OF 15 PERCENT CA(OH)_2 SLURRY SHALL BE INJECTED TO THE SPRAY DRYER, OR NOT LESS THAN 43 GALLONS PER HOUR OF 20 PERCENT NaOH SLURRY TO THE SPRAY DRYER, OR NOT LESS THAN 100 LB/HR OF DRY LIME SHALL BE INJECTED INTO THE FURNACE DURING ANY PERIOD THE SO_2 CEMS IS NOT PROPERLY OPERATING.

16. BY DECEMBER 19, 1998, CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF NITROGEN (NOX)	205 PPMV (24-HR DAILY ARITHMETIC AVERAGE)
OXIDES OF SULFUR (SOX)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
CARBON MONOXIDE (CO)	100 PPMV (4-HR ARITHMETIC AVERAGE)
PARTICULATE MATTER (PM)	27 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.04 mg/DSCM
LEAD	0.44 mg/DSCM
MERCURY	0.080 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION

17. THE TOTAL NON-METHANE HYDROCARBON EMISSIONS SHALL BE MEASURED BY USING AQMD METHOD 25.1 OR ANOTHER EQUIVALENT METHOD APPROVED BY THE AQMD. IF AN ALTERNATE METHOD IS ADOPTED WHICH IS SHOWN TO RESULT IN A HIGHER TOTAL HYDROCARBON EMISSION THAN THAT CONTAINED IN CONDITION NO. 18, THE FACILITY OPERATOR MAY REQUEST A CHANGE IN THE EMISSION LIMIT TO REFLECT THE HIGHER VALUE. THE REQUEST SHALL BE IN WRITING, AND SHALL BE FILED AFTER THE FIRST ANNUAL SOURCE TEST IS CONDUCTED USING THE ALTERNATIVE TEST METHOD.

18. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONTAMINANT	LB/DAY
NITROGEN OXIDES	825
PM10	123
SULFUR OXIDES	100
CARBON MONOXIDE	300
TOTAL HYDROCARBONS	58

19. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58(b)(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.

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20. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY DRYER;
 - B. IN THE DUCT FOLLOWING THE SPRAY DRYER BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.

21. THE OWNER OR OPERATOR OF COMMERCE REFUSE TO ENERGY FACILITY SHALL CONDUCT PERFORMANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR PART 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE COMBUSTOR/BOILER EXHAUST STREAM FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
 - B. PARTICULATE MATTER
 - C. HYDROGEN CHLORIDE
 - D. EXHAUST FLOW RATE, WET AND DRY
 - E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE, AND CORONENE.
 - F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
 - G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, NICKEL, LEAD, MANGANESE, MERCURY, SELENIUM AND ZINC)
 - H. OPACITY
 - I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
 - J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
 - K. OXIDES OF NITROGEN WITH AMMONIA INJECTION (AS VOLUME PERCENT, AT 3% O₂ ON A DRY BASIS)
 - L. OXIDES OF SULFUR
 - M. CARBON MONOXIDE
 - N. FUGITIVE ASH USING EPA METHOD 22
22. THE OWNER OR OPERATOR OF COMMERCE REFUSE-TO-ENERGY FACILITY SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1st OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE

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TESTS WERE CONDUCTED. THE REPORT SHALL ALSO INCLUDE THE INFORMATION SPECIFIED IN 40 CFR PART 60.59b(g), AS APPLICABLE.

23. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST 5 YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
24. IN ACCORDANCE WITH AQMD RULE 218, THE COMMERCE REFUSE TO ENERGY FACILITY OPERATOR SHALL SUBMIT A MONTHLY SUMMARY OF THE CONCENTRATION AND EMISSION DATA FROM THE CEMS WITHIN 30 DAYS OF THE END OF THE MONTH BEING REPORTED.

This Permit to Operate No. R-D96066 supersedes Permit to Operate No. D96066 issued on 1/30/96.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/7/98

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This initial permit shall be renewed by **ANNUALLY** unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

ID 044577

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 1.
2. COMBUSTOR/BOILER NO. 1, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
4. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).
5. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).
6. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
9. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE. NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD.
10. FOR THE PURPOSE OF THIS PERMIT, A START-UP SHALL BE DEFINED AS THE FIRST 3 HOURS AFTER THE COMBUSTOR BEGINS THE CONTINUOUS BURNING OF MUNICIPAL SOLID WASTE.
11. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN SHALL BE DEFINED AS THE PERIOD OF TIME STARTING FROM THE CESSATION OF REFUSE CHARGING INTO THE FURNACE UNTIL COMPLETE REFUSE BURNOUT. DURING SHUTDOWN, THE FURNACE SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED. THE DURATION OF A SHUTDOWN SHALL NOT EXCEED 3 HOURS PER OCCURRENCE.

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12. EXCEPT AS PROVIDED BY PART 60.56b, THE APPLICABLE STANDARDS UNDER 40 CFR SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF WARM-UP, START-UP, SHUTDOWN, OR MALFUNCTION. FOR THE PURPOSE OF COMPLIANCE WITH THIS CONDITION, A MALFUNCTION SHALL ALSO BE LIMITED TO 3 HOURS PER OCCURRENCE.
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
15. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(b).
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
17. THE OPERATOR SHALL TAKE STEPS TO MINIMIZE THE COMBUSTION OF TIRES AND OTHER SULFUR BEARING MATERIALS.
18. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
19. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

This Permit to Operate No. R-D87714 supersedes Permit to Operate No. D87714 issued on 1/20/95.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

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NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

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EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/19/98

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

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A/N 274832
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This initial permit shall be renewed by **ANNUALLY** unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

ID 044577

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 1 CONSISTING OF:

1. ROTARY ATOMIZER NO. 1 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 1.
2. SPRAY DRYER TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 1.
3. BAGHOUSE NO. 1, WITH TEN COMPARTMENTS, CROSS-OVER DUCTING, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA AND A MAXIMUM AIR-TO-CLOTH RATIO OF 2.0 TO 1.0.
4. INDUCED DRAFT FAN NO. 1 VENTING RESOURCE RECOVERY SYSTEM NO. 1.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND SHALL REMAIN IN CLOSED CONVEYORS UNTIL CONDITIONED IN THE ASH CONDITIONER, EXCEPT DURING MAINTENANCE AND REPAIR, DUST OR FLYASH COLLECTED IN THE SPRAY DRYER SHALL BE REMOVED IN AN ENCLOSED SYSTEM.
5. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE,

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CONTINUATION OF PERMIT TO OPERATE

THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.

6. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
7. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b.
8. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
9. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
10. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
11. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(c).
12. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
13. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPMV (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
14. BY DECEMBER 19, 1998, CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT

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CONTINUATION OF PERMIT TO OPERATE

EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).

15. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SOX) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY COLLECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12% CO₂ (8 HOUR AVERAGE).

16. BY DECEMBER 19, 1998, CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SOX)	29 PPMV OR 75 % WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	27 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.04 mg/DSCM
LEAD	0.44 mg/DSCM
MERCURY	0.080 mg/DSCM OR 85 % WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95 % WT. REDUCTION

17. BY DECEMBER 19, 2000, CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS. THE OWNER OR OPERATOR OF SERRF SHALL ADHERE TO THE MEASURABLE AND ENFORCEABLE INCREMENTAL STEPS OF PROGRESS, AS LISTED BELOW, TO ACHIEVE COMPLIANCE WITH THE CONCENTRATION LIMIT OF 100 PPMV:

INCREMENTAL STEPS	DEADLINE
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- | | |
|---|--------------|
| 1. Submit final control plan to SCAQMD | July 1998 |
| 2. Award contract for control system, or process modification, or orders for purchase of components | April 1999 |
| 3. Initiating of on-site construction or installation of the air pollution control devices or process changes | October 1999 |
| 4. Completing on-site construction or installation control device or process changes | April 2000 |
| 5. Final Compliance | Dec 19, 2000 |

18. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONTAMINANT	LB/DAY
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CONTINUATION OF PERMIT TO OPERATE

NITROGEN OXIDES	816
PM10	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

19. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
20. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY DRYER;
 - B. IN THE DUCT FOLLOWING THE SPRAY DRYER BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
21. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR PART 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)

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CONTINUATION OF PERMIT TO OPERATE

- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NOX)
- L. OXIDES OF SULFUR (SOX)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

- 22. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1 OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE REPORT SHALL ALSO INCLUDE THE INFORMATION SPECIFIED IN 40 CFR PART 60.59b, AS APPLICABLE.
- 23. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
- 24. IN ACCORDANCE WITH AQMD RULE 218, THE SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) OPERATOR SHALL SUBMIT A MONTHLY SUMMARY OF THE CONCENTRATION AND EMISSION DATA FROM THE CEMS WITHIN 30 DAYS OF THE END OF THE MONTH BEING REPORTED.

This Permit to Operate No. R-D87608 supersedes Permit to Operate No. R-D87608 reissued on 5/19/98.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

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Permit No.
R-D87608
A/N 274832
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CONTINUATION OF PERMIT TO OPERATE

NOTICE

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THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/29/98

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This initial permit shall be renewed by ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

ID 044577

Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 2.
2. COMBUSTOR/BOILER NO. 2, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
4. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).
5. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).
6. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
9. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE. NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD.
10. FOR THE PURPOSE OF THIS PERMIT, A START-UP SHALL BE DEFINED AS THE FIRST 3 HOURS AFTER THE COMBUSTOR BEGINS THE CONTINUOUS BURNING OF MUNICIPAL SOLID WASTE.
11. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN SHALL BE DEFINED AS THE PERIOD OF TIME STARTING FROM THE CESSATION OF REFUSE CHARGING INTO THE FURNACE UNTIL COMPLETE REFUSE BURNOUT. DURING SHUTDOWN, THE FURNACE SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED. THE DURATION OF A SHUTDOWN SHALL NOT EXCEED 3 HOURS PER OCCURRENCE.

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12. EXCEPT AS PROVIDED BY PART 60.56b, THE APPLICABLE STANDARDS UNDER 40 CFR SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF WARM-UP, START-UP, SHUTDOWN, OR MALFUNCTION. FOR THE PURPOSE OF COMPLIANCE WITH THIS CONDITION, A MALFUNCTION SHALL ALSO BE LIMITED TO 3 HOURS PER OCCURRENCE.
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
15. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(b).
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
17. THE OPERATOR SHALL TAKE STEPS TO MINIMIZE THE COMBUSTION OF TIRES AND OTHER SULFUR BEARING MATERIALS.
18. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
19. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

This Permit to Operate No. R-D87716 supersedes Permit to Operate No. D87716 issued on 1/20/95.

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NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

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EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/19/98

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This initial permit shall be renewed by **ANNUALLY** unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

ID 044577

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 2 CONSISTING OF:

1. ROTARY ATOMIZER NO. 2 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 2.
2. SPRAY DRYER TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 2.
3. BAGHOUSE NO. 2, WITH TEN COMPARTMENTS, CROSS-OVER DUCTING, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA AND A MAXIMUM AIR-TO-CLOTH RATIO OF 2.0 TO 1.0.
4. INDUCED DRAFT FAN NO. 2 VENTING RESOURCE RECOVERY SYSTEM NO. 2.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND SHALL REMAIN IN CLOSED CONVEYORS UNTIL CONDITIONED IN THE ASH CONDITIONER, EXCEPT DURING MAINTENANCE AND REPAIR, DUST OR FLYASH COLLECTED IN THE SPRAY DRYER SHALL BE REMOVED IN AN ENCLOSED SYSTEM.
5. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE,

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CONTINUATION OF PERMIT TO OPERATE

THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.

6. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
7. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b.
8. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
9. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
10. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
11. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(c).
12. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
13. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPMV (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
14. BY DECEMBER 19, 1998, CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT

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EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).

15. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SOX) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY COLLECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12% CO₂ (8 HOUR AVERAGE).
16. BY DECEMBER 19, 1998, CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SOX)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	27 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.04 mg/DSCM
LEAD	0.44 mg/DSCM
MERCURY	0.080 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION

17. BY DECEMBER 19, 2000, CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS. THE OWNER OR OPERATOR OF SERRF SHALL ADHERE TO THE MEASURABLE AND ENFORCEABLE INCREMENTAL STEPS OF PROGRESS, AS LISTED BELOW, TO ACHIEVE COMPLIANCE WITH THE CONCENTRATION LIMIT OF 100 PPMV:

INCREMENTAL STEPS	DEADLINE
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- | | |
|---|--------------|
| 1. Submit final control plan to SCAQMD | July 1998 |
| 2. Award contract for control system, or process modification, or orders for purchase of components | April 1999 |
| 3. Initiating of on-site construction or installation of the air pollution control devices or process changes | October 1999 |
| 4. Completing on-site construction or installation control device or process changes | April 2000 |
| 5. Final Compliance | Dec 19, 2000 |

18. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONTAMINANT	LB/DAY
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CONTINUATION OF PERMIT TO OPERATE

NITROGEN OXIDES	816
PM10	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

19. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k). EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
20. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY DRYER;
 - B. IN THE DUCT FOLLOWING THE SPRAY DRYER BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
21. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR PART 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAN AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)

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- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NOX)
- L. OXIDES OF SULFUR (SOX)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

- 22. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1 OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE REPORT SHALL ALSO INCLUDE THE INFORMATION SPECIFIED IN 40 CFR PART 60.59b, AS APPLICABLE.
- 23. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
- 24. IN ACCORDANCE WITH AQMD RULE 218, THE SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) OPERATOR SHALL SUBMIT A MONTHLY SUMMARY OF THE CONCENTRATION AND EMISSION DATA FROM THE CEMS WITHIN 30 DAYS OF THE END OF THE MONTH BEING REPORTED.

This Permit to Operate No. R-D87609 supersedes Permit to Operate No. R-D87609 reissued on 5/19/95.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

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EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/29/98

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AQMD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

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This initial permit shall be renewed by **ANNUALLY** unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

ID 044577

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 3 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 3.
2. COMBUSTOR/BOILER NO. 3, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
4. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).
5. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).
6. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
9. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE. NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD.
10. FOR THE PURPOSE OF THIS PERMIT, A START-UP SHALL BE DEFINED AS THE FIRST 3 HOURS AFTER THE COMBUSTOR BEGINS THE CONTINUOUS BURNING OF MUNICIPAL SOLID WASTE.
11. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN SHALL BE DEFINED AS THE PERIOD OF TIME STARTING FROM THE CESSATION OF REFUSE CHARGING INTO THE FURNACE UNTIL COMPLETE REFUSE BURNOUT. DURING SHUTDOWN, THE FURNACE SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED. THE DURATION OF A SHUTDOWN SHALL NOT EXCEED 3 HOURS PER OCCURRENCE.

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12. EXCEPT AS PROVIDED BY PART 60.56b, THE APPLICABLE STANDARDS UNDER 40 CFR SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF WARM-UP, START-UP, SHUTDOWN, OR MALFUNCTION. FOR THE PURPOSE OF COMPLIANCE WITH THIS CONDITION, A MALFUNCTION SHALL ALSO BE LIMITED TO 3 HOURS PER OCCURRENCE.
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
15. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(b).
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
17. THE OPERATOR SHALL TAKE STEPS TO MINIMIZE THE COMBUSTION OF TIRES AND OTHER SULFUR BEARING MATERIALS.
18. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
19. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

This Permit to Operate No. R-D87717 supersedes Permit to Operate No. D87717 issued on 1/20/95.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

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EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/19/98

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This initial permit shall be renewed by **ANNUALLY** unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

Or Operator:

LONG BEACH CITY, SERRF PROJECT
120 HENRY FORD AVE
LONG BEACH, CA 90802

ID 044577

Equipment

located at: 120 HENRY FORD AV, LONG BEACH, CA 90802-1039

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 3 CONSISTING OF:

1. ROTARY ATOMIZER NO. 3 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 3.
2. SPRAY DRYER TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 3.
3. BAGHOUSE NO. 3, WITH TEN COMPARTMENTS, CROSS-OVER DUCTING, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA AND A MAXIMUM AIR-TO-CLOTH RATIO OF 2.0 TO 1.0.
4. INDUCED DRAFT FAN NO. 3 VENTING RESOURCE RECOVERY SYSTEM NO. 3.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. BY DECEMBER 19, 1998, THE FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR PART 60.54b.
4. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND SHALL REMAIN IN CLOSED CONVEYORS UNTIL CONDITIONED IN THE ASH CONDITIONER, EXCEPT DURING MAINTENANCE AND REPAIR, DUST OR FLYASH COLLECTED IN THE SPRAY DRYER SHALL BE REMOVED IN AN ENCLOSED SYSTEM.
5. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE,

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THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.

6. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
7. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b.
8. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
9. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
10. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
11. BY DECEMBER 19, 1998, THE OWNER OR OPERATOR SHALL INSTALL, MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR PART 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR PART 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR PART 60.53b(c).
12. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
13. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPMV (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
14. BY DECEMBER 19, 1998, CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT

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CONTINUATION OF PERMIT TO OPERATE

EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).

15. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SOX) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY COLLECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12% CO₂ (8 HOUR AVERAGE).

16. BY DECEMBER 19, 1998, CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SOX)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	27 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.04 mg/DSCM
LEAD	0.44 mg/DSCM
MERCURY	0.080 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION

17. BY DECEMBER 19, 2000, CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS. THE OWNER OR OPERATOR OF SERRF SHALL ADHERE TO THE MEASURABLE AND ENFORCEABLE INCREMENTAL STEPS OF PROGRESS, AS LISTED BELOW, TO ACHIEVE COMPLIANCE WITH THE CONCENTRATION LIMIT OF 100 PPMV:

INCREMENTAL STEPS	DEADLINE
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- | | |
|---|--------------|
| 1. Submit final control plan to SCAQMD | July 1998 |
| 2. Award contract for control system, or process modification, or orders for purchase of components | April 1999 |
| 3. Initiating of on-site construction or installation of the air pollution control devices or process changes | October 1999 |
| 4. Completing on-site construction or installation control device or process changes | April 2000 |
| 5. Final Compliance | Dec 19, 2000 |

18. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONTAMINANT	LB/DAY
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NITROGEN OXIDES	816
PM10	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

19. BY DECEMBER 19, 1998, VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR PART 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
20. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY DRYER;
 - B. IN THE DUCT FOLLOWING THE SPRAY DRYER BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
21. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR PART 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)

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- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NOX)
- L. OXIDES OF SULFUR (SOX)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

- 22. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1 OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE REPORT SHALL ALSO INCLUDE THE INFORMATION SPECIFIED IN 40 CFR PART 60.59b, AS APPLICABLE.
- 23. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR PART 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
- 24. IN ACCORDANCE WITH AQMD RULE 218, THE SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) OPERATOR SHALL SUBMIT A MONTHLY SUMMARY OF THE CONCENTRATION AND EMISSION DATA FROM THE CEMS WITHIN 30 DAYS OF THE END OF THE MONTH BEING REPORTED.

This Permit to Operate No. R-D87610 supersedes Permit to Operate No. R-D87610 reissued on 5/19/98.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

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A/N 274834
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EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/gl
5/29/98

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